

IN THE DRAWINGS

Please substitute the enclosed sheet 1/9 of the drawings for the sheet 1/9 currently on file. Fig. 1 has been identified as prior art, as required by the Examiner.

REMARKS

By the foregoing Amendment, Claims 1, 3 and 4 have been amended, Claim 2 has been cancelled, and Fig. 1 has been corrected to be identified as prior art. Favorable consideration of the application is respectfully requested.

The Examiner objected to Fig. 1 as not being designated as prior art. Fig. 1 has now been amended as required by the Examiner, so that it is believed that this objection to the drawings can be withdrawn.

In the Office Action dated October 31, 2005, the Examiner rejected Claims 1, 15, and 16 under 35 USC 102(b) as being anticipated by Nishida et al. (5,387,399), Eltron (DE 4223513) or Bosch (DE29504255). Claim 1 has been amended to recite "wherein the firing portion comprises a plurality of spaced apart elongate elements formed of wire with elongate fuel flow passages therebetween, and wherein the wire is wedge wire having a generally triangular cross section." As shown in figure 1 of Nishida et al., the structure to which Examiner points as anticipating Claim 1 is a catalytic converter located downstream of the combustion site, dealing with post-combustion gases. Nowhere does Nishida et al. disclose, teach or suggest a burner head having a firing portion with spaced apart elongated elements formed of wedge wire having a triangular cross section, as is claimed.

As shown in Figs. 1-6 of Bosch, the structures disclosed only show burner heads with rectangular elements. Nowhere does Bosch disclose, teach or suggest a burner head having a firing portion with spaced apart elongated elements formed of wedge wire having a triangular cross section, as is claimed.

As shown in Fig. 3 of Eltron, the structure disclosed only shows burner heads with rectangular elements. Nowhere does Eltron disclose, teach or suggest a burner head having a firing portion with spaced apart elongated elements formed of wedge wire having a triangular cross section, as is claimed.

Applicant's device is a burner head which enables fuel in gaseous form to travel through triangular elongate elements and combust on the far side. The claimed structure has the advantages of producing a predictable and stable flame with a low risk of flashback, as is disclosed at page 1, lines 15-17 of the specification. It is the form of the passages which result from the claimed structure that bestow these advantages upon the claimed device. It is considered significant that in the present invention wedge wire of triangular cross section is used to provide fuel flow passages through the burner head which either narrow down from the inside to the outside, or widen out from the inside to the outside, but do not widen and then narrow, as is the case in Nishida et al., which discloses octagonal, hexagonal or oval elements. No teaching whatsoever can be found in Nishida et al. for providing elongate elements formed of wedge wire that are triangular in cross section, let alone teaching for a device that provides a stable and predictable flame.

Similarly, Eltron and Bosch do not disclose a burner head having elongate elements having a generally triangular cross section. Eltron discloses a burner plate consisting of numerous corrugated metal strips (7) with a strip wall thickness that is considerably less than their width (B). As shown in FIG. 3, Eltron only discloses rectangular strips. As apparent from FIGS. 1-6 of Bosch, Bosch only discloses

rectangular elements. Thus, it is respectfully submitted that Claims 1, 15, and 16 are novel and inventive over Nishida et al., Eltron, and Bosch, taken alone or in combination, and that the rejection of Claims 1, 15 and 16 on the grounds of anticipation from Nishida et al., Eltron or Bosch should be withdrawn.

Claims 1, 2, 5, 15, and 16 were rejected under 35 USC 102(b) as anticipated by Alexander (WO9105973). Claim 2 has been cancelled. Claim 1 recites "wherein the firing portion comprises a plurality of spaced apart elongate elements formed of wire with elongate fuel flow passages therebetween, and wherein the wire is wedge wire having a generally triangular cross section." Alexander discloses a gas heater with a burner composed of filaments that extend in random convolutions or in a multiple layer helical configuration. It is respectfully submitted that Alexander also fails to teach, disclose, or suggest a burner head having a firing portion with spaced apart elongated elements formed of wedge wire having a triangular cross section, as is claimed. It is therefore respectfully submitted that Claims 1, 5, 15 and 16 are novel and inventive over Alexander, and that the rejection of Claims 1, 2, 5, 15 and 16 should be withdrawn.

Claims 3, 4, and 6-14 were rejected under 35 USC 103(a) as unpatentable over Alexander in view of Nishida et al. As noted above, Claim 1 has been amended to recite "wherein the firing portion comprises a plurality of spaced apart elongate elements formed of wire with elongate fuel flow passages therebetween, and wherein the wire is wedge wire having a generally triangular cross section." It is respectfully submitted that Alexander and Nishida et al. fail to disclose, teach or suggest a burner head having a firing portion with spaced apart elongated elements formed of wedge wire having a


triangular cross section, as is claimed, and that Claims 3, 4 and 6-14 are novel and inventive over Alexander and Nishida et al., taken individually or in combination. It is therefore respectfully submitted that the rejection of Claims 3, 4 and 6-14 on the grounds of obviousness from Alexander in view of Nishida et al. should be withdrawn.

Applicant has reviewed the additional prior art made of record and not relied upon, and it is believed that the prior art made of record and not relied up upon is no more pertinent than the art applied by the Examiner.

In light of the foregoing remarks, it is respectfully submitted that the application should now be in condition for allowance, and favorable consideration of the application is respectfully requested.

Respectfully submitted,

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